

PROPOSED

Issuance Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(xxx)

14-xxxE CAB
File No. 0087-07

Mr. Jeff Walsh
President and General Manager
AES Hawaii, Inc.
91-086 Kaomi Loop
Kapolei, Hawaii 96707-1883

Dear Mr. Walsh:

Subject: Covered Source Permit (CSP) No. 0087-02-C
Application for Renewal No. 0087-07
AES Hawaii, Inc.
203 MW Coal-Fired Cogeneration Plant
Located At: 91-086 Kaomi Loop, Campbell Industrial Park, Kapolei, Oahu
Date of Expiration: Issuance Date + 5 years

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on your application for renewal received on July 19, 2013 and additional information dated August 21, 2013 and December 9, 2013. This permit shall supersede CSP No. 0087-01-C issued on July 20, 2009 and amended on April 3, 2012 and May 30, 2013, in its entirety. A receipt for the application filing fee of \$3,000.00 is enclosed.

The Covered Source Permit is issued subject to the conditions/requirements set forth in the following Attachments:

- Attachment I: Standard Conditions
- Attachment IIA: Special Conditions - CFB Boilers
- Attachment IIB: Special Conditions - Coal Processing
- Attachment IIC: Special Conditions - Limestone Processing
- Attachment IID: Special Conditions - Cooling Tower
- Attachment IIE: Special Conditions - Ash Handling
- Attachment IIF: Special Conditions - Storage Tank
- Attachment II - INSIG: Special Conditions - Insignificant Activities
- Attachment III: Annual Fee Requirements
- Attachment IV: Annual Emissions Reporting Requirements

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The following forms are enclosed for your use and submittal as required:

- Compliance Certification Form
- Monitoring Report Form: Fuel Usage/Certification
- Monitoring Report Form: Spec Used Oil
- Monitoring Report Form: Wood Fuel
- Monitoring Report Form: Storage Tank
- Monitoring Report Form: Opacity Exceedances
- Annual Emissions Report Form: Boilers/Dryers
- Annual Emissions/Monitoring Report Form: Cooling Tower
- Excess Emission and Monitoring System Performance Summary Report

The following are enclosed for your use in monitoring visible emissions:

- Visible Emissions Form Requirements, State of Hawaii
- Visible Emissions Form

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Department of Health, Clean Air Branch (herein after referred to as Department), or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

If you have any questions, please contact Mr. Darin Lum of the Clean Air Branch at (808) 586-4200.

Sincerely,

STUART YAMADA, P.E., CHIEF
Environmental Management Division

DL:nn
Enclosures

c: CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

(Auth.: HAR §11-60.1-90)
2. This permit or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

(Auth.: HAR §11-60.1-6; SIP §11-60-11)²
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)²
4. A request for transfer from person to person shall be made on forms furnished by the Department.

(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department and the U.S. Environmental Protection Agency (EPA), Region 9.

(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections, 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department and U.S. EPA, Region 9, in writing of the following dates:

- a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
- b. The **actual date of construction commencement** within fifteen (15) days after such date; and
- c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department but also directly to the U.S. EPA, Region 9, along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
 - a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)²

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit**, the permittee shall immediately notify the Department of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as

practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

- a. Identification of each affected emission point and each emission limit exceeded;
- b. Magnitude of each excess emission;
- c. Time and duration of each excess emission;
- d. Identity of the process or control equipment causing the excess emission;
- e. Cause and nature of each excess emission;
- f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
- g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
- h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)²

18. The permittee may request confidential treatment of any records in accordance with HAR, Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

19. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

- a. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions, of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

20. The Department may extend the time periods specified in Standard Condition No. 19 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

22. All certifications shall be in accordance with HAR, Section 11-60.1-4.

(Auth.: HAR §11-60.1-4, HAR §11-60.1-90)

23. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to ensure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

24. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of a covered source covered by this permit**, the discontinuance shall be reported in writing to the Department by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)²

25. Each permit renewal application shall be submitted to the Department and the U.S. EPA, Region 9, no less than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Director may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Director determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5(a)(1)(iii))¹

26. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

27. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR,

Section 11-60.1-86, the compliance certification shall be submitted to the Department and the U.S. EPA, Region 9, once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

28. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

Upon request and as required by this permit, all correspondence to the State of Hawaii Department associated with this Covered Source Permit shall have duplicate copies forwarded to:

**Chief
Permits Office, (Attention: Air-3)
Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

29. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received ("stamped") at the Clean Air Branch shall be used to determine the submittal date.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIA: SPECIAL CONDITIONS
CFB BOILERS
COVERED SOURCE PERMIT NO. 0087-02-C**

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIA of the Covered Source Permit encompasses the following equipment and associated appurtenances:

- a. CFB Boilers A and B

Two (2) Alstrom Pyropower Corp., circulating fluidized bed (CFB) steam boilers with a total maximum design heat input of 2,150 MMBtu/hr.

- b. Air Pollution Control Equipment for CFB Boilers:

- 1) Limestone injection system;
 - 2) Selective non-catalytic reduction (SNCR) with ammonia/urea injection (Thermal DeNO_x); and
 - 3) Two (2) Asea Brown Boveri (ABB) baghouses (Flakt Model 2).

- c. 25,000 gallon pressurized anhydrous ammonia storage tank.

(Auth.: HAR §11-60.1-3)

2. An identification tag or nameplate shall be displayed on the equipment listed above which identifies the model no., serial no., and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. This equipment is subject to the provisions of the following sections:

- a. 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources:

- 1) Subpart A - General Provisions; and
 - 2) Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.

- b. 40 CFR Part 52.21, Prevention of Significant Deterioration of Air Quality.

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- c. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories:

- 1) Subpart A – General Provisions;
- 2) Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants from Coal and Oil Fired Electric Utility Steam Generating Units; and
- 3) The permittee must comply with 40 CFR Part 63, Subpart UUUUU, no later than April 16, 2015.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, testing, monitoring, and reporting requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR 60.1, 40 CFR 60.40a, 40 CFR 52.21, 40 CFR 63.1, 40 CFR 63.9980, 40 CFR §63.9984)¹

2. The storage and use of ammonia in this facility is subject to the provisions of 40 CFR Part 68, Chemical Accident Prevention Provisions. The permittee shall comply with all applicable requirements, including submittal of:
- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
 - b. As part of the compliance certification submitted pursuant to Attachment I, Standard Condition No. 28, a certification statement that the facility is in compliance with all requirements of 40 CFR 68, including the registration and submission of the Risk Management Plan.

(Auth.: HAR §11-60.1-3, §11-60.1-90, 40 CFR §68)¹

Section C. Operational and Emission Limitations

1. The CFB boilers (boilers) shall be fired primarily on coal. In the event that the emissions of sulfur dioxide (SO₂) exceed 645.0 lb/hr, 1.2 lb/MMBtu, or 48 parts per million by volume dry (ppmvd), at 15% O₂ while firing coal with a sulfur content in excess of 1.5 percent by weight, the permittee shall immediately take steps to limit the feed rate of coal until such time as the process returns to compliance with the SO₂ permit limits in Attachment IIA, Special Condition No. C.10. During hot or cold startups, the boilers may be fired on fuel oil no. 2 with a maximum sulfur content not to exceed 0.5 percent by weight.

(Auth.: HAR §11-60.1-5, §11-60.1-38, §11-60.1-90)

2. Wood Fuel

- a. The boilers may also be fired on a mixture of coal and wood fuel such that the combined feed rate does not exceed 233,000 lb/hr (116.5 tons/hr).

- b. The maximum amount of wood fuel fired into the boilers shall not exceed 20 tons/hr and 175,200 tons per any rolling twelve-month (12-month) period.
- c. The maximum heat input from wood fuel firing shall not exceed 215 MMBtu/hr and 1,883,400 MMBtu per any rolling twelve-month (12-month) period.
- d. All wood fuel, including wood processed into pellets which may utilize a *polyethylene binder*, fired by the boilers shall be untreated and uncontaminated by paint, glues, preservatives, oils, added chemicals, or similar foreign substances. Use of construction demolition debris of any type as wood fuel is explicitly prohibited.
- e. Wood fuel shall consist of chips or pellets of uncontaminated whole tree wood, including stumps, branches, bark, chips, and sawdust.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. Tire Derived Fuel (TDF)

- a. The boilers may also be fired on a mixture of coal and TDF such that the combined feed rate does not exceed 215,000 lb/hr (107.5 tons/hr).
- b. The boilers may also be fired on a mixture of coal, TDF, and wood such that the combined feed rate does not exceed 233,000 lb/hr (116.5 tons/hr).
- c. The maximum amount of TDF fired into the boilers shall not exceed 7.5 tons/hr.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

4. Spent Activated Carbon

The boilers may also be fired on spent activated carbon. The spent activated carbon shall be obtained only from the Board of Water Supply in Honolulu, Hawaii Independent Energy, LLC, and Kalaelo Partners. Spent activated carbon may be obtained from other sources, provided a written notification identifying the new source is submitted to the Department, and approved, prior to the acceptance of the spent activated carbon.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

5. Specification (Spec) Used Oil

- a. The boilers may also be fired on spec used oil such that the total usage does not exceed 3,000,000 gallons in any rolling twelve-month (12-month) period.
- b. The permit conditions prescribed herein may at any time be revised by the Department to reflect federal or state promulgated rules on used oil.
- c. This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing, and burning of used oil.
- d. The used oil shall be obtained only from Unitek Solvent Services, Inc., Phillips Services, and sources within AES Hawaii, Inc. Used oil may be obtained from other source provided a written notification identifying the new source is submitted to the Department and approved prior to the acceptance of the used oil.

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- e. Samples of the used oil generated from the facility shall be taken from the holding tanks or drums and composited and analyzed for compliance with the limits in Attachment IIA, Special Condition No. C.5.i, prior to being emptied into the reclaim tank and burned. These samples shall be taken in such a manner that the composite sample is representative of all of the used oil generated by the facility for that period of time. The composite sample shall represent no more than 5,000 gallons of used oil or all of the used oil collected in any three-month (3-month) period, whichever is less.
- f. Each composite sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties for which limits are given in Attachment IIA, Special Condition No. C.5.i.
- g. Analysis reports shall be obtained (for the twice monthly testing) for the constituents/properties for which limits are given in Attachment IIA, Special Condition No. C.5.i, for all deliveries of spec used oil.
- h. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if declared or determined to be a hazardous waste.
- i. The following constituents/properties of the spec used oil shall not exceed the specified units listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	0.5% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	< 2 ppm

- j. Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment IIA, Special Condition No. C.5.i, is allowable only for spec used oil that were not deemed hazardous.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-140, 40 CFR §279.11)

6. Air Pollution Control Equipment

The permittee shall continuously operate and maintain the following air pollution controls to meet the emissions limits as specified in Attachment IIA, Special Condition No. C.10. The following controls shall be fully operational upon startup and thereafter:

- a. A limestone injection system shall be used to meet the sulfur dioxide and lead emission limits three-hour (3-hour) average as shown in Attachment IIA, Special Condition No. C.10, and a minimum sulfur dioxide removal efficiency of 75%.

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- b. A SNCR system shall be used to meet the nitrogen oxide emission limit three-hour (3-hour) average as shown in Attachment IIA, Special Condition No. C.10.
- c. Baghouses shall be used to meet the particulate matter and lead emission limits three-hour (3-hour) average as shown in Attachment IIA, Special Condition No. C.10.
 - 1) The pressure drop across the baghouses shall be maintained at 1" to 9" H₂O.
 - 2) The permittee shall follow a regular maintenance schedule to ensure the following items of the baghouses are operating properly:
 - a) The filter bags are checked for any tears, holes, abrasions and scuffs, and replaced as needed;
 - b) The hoppers are discharged in a timely manner to prevent excessive particulate buildup which could cause compaction, overflow, or plugging;
 - c) The cleaning systems are maintained and operated at sufficient intervals to minimize particulate buildup or caking on the filter bags; and
 - d) Other miscellaneous items/equipment essential for the effective operation of the baghouses are maintained.
 - 3) The baghouses shall be operated at all times during boiler operations.
- d. The equipment listed in **Section A** of this attachment shall be properly maintained and kept in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer or as needed to meet the emission limits as shown in Attachment IIA, Special Condition No. C.10.

(Auth.: HAR §11-60.1-3, §11-60.1-5, HAR §11-60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR 60.42a, 40 CFR 60.43a, 40 CFR 68)¹

7. Ammonia Storage Tank

The 25,000 gallon anhydrous ammonia storage tank associated with the Thermal DeNO_x system shall be pressurized and equipped with an over pressure detection system. The filling of ammonia into the storage tank shall be done under a closed system where the displaced vapors from the storage tank are routed back to the delivery vessel.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR 68)¹

8. Fugitive Particulate Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, etc.) at all material transfer points, stockpiles, and throughout the workyard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible

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emissions or fugitive dust beyond the lot line of the property on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-33, §11-60.1-90)

9. Opacity of Stack Emissions

The permittee shall not discharge or cause the discharge into the atmosphere emissions from the boilers' stack exhibiting an opacity of twenty (20) percent or greater six-minute (6-minute) average, except for one (1) six-minute (6-minute) period per hour of not more than twenty-seven (27) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, 40 CFR 60.42a)¹

10. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from the stack of the boilers, air pollutant emissions in excess of the following specified limits except during startup, shutdown, malfunction, and emergency conditions (as defined in 40 CFR §60.41a):

Compound	Maximum Emission Limits ¹			
	lb/hr	lb/MMBtu	ppmvd @ 15%O ₂	gr/dscf @ 12% CO ₂ , dry
SO ₂	645.0	1.2	48	--
NO _x baseload ²	236.5	0.5	25	--
NO _x low load ^{2,3}	236.5	0.5	59	--
CO	408.4	--	70	--
VOC ⁴	32.2	--	3.5	--
Lead (Pb)	5.7	--	--	1.2E-3
PM/PM ₁₀ ⁵	32.2	0.03	--	7.0E-3
Fluorides	0.2	9.3E-5	--	--
Mercury	0.17	8.1E-5 (prior to 4/16/2015), 1.2 E-6 (on and after 4/16/2015)	--	--
Beryllium	0.067	3.1E-5	--	--

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Compound	Maximum Emission Limits ¹			
	lb/hr	lb/MMBtu	ppmvd @ 15%O ₂	gr/dscf @ 12% CO ₂ , dry
Sulfuric Acid Mist	4.10	1.9E-3	--	--
Hydrogen Chloride (HCl)	4.30	0.002		

¹Three-hour (3-hour) average with standard conditions assumed to be 68 °F and 29.92 inches Hg. Stack concentrations assumed to be 5% H₂O, 6.5% O₂ and 12% CO₂. Stack temperature at outlet is 265 °F and stack pressure at outlet is atmospheric (29.92 inches Hg).

²Molecular weight of NO_x taken to be that of NO₂ (46).

³Low load is an individual boiler heat input of less than 450 mmBtu/hr.

⁴Molecular weight of VOC taken to be that of propane (44).

⁵PM₁₀ emission rate assumed to be 100% of the total particulate matter (TSP) emission rate.

(Auth.: HAR §11-60.1-3, HAR §11-60.1-5, HAR §11-60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR 60.42a, 40 CFR 60.43a, 40 CFR 60.44a)¹

Section D. Monitoring and Recordkeeping Requirements

1. Fuel Monitoring and Recordkeeping

- a. The sulfur content of the coal fired in the boilers shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods. The sulfur content of the coal shall be verified by both of the following methods:

- 1) A representative sample of the coal used by the boilers shall be analyzed for its sulfur content by weight **at least once a month**; and
- 2) A certificate of analysis on the sulfur content of the coal shall be obtained from the respective suppliers **upon delivery of shipments**.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

- b. The permittee shall operate and maintain individual fuel measurement systems for the continuous measurement and recording of the amount of coal and TDF being fired in the boilers.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

- c. The permittee shall operate and maintain a non-resetting flow meter for the continuous measurement and recording of the amount of spec used oil being fired in the boilers. Monthly records shall be kept of the beginning meter readings and the total fuel usage.

Monthly fuel summaries shall include the monthly total fuel usage and the total fuel used based on a twelve-month (12-month) rolling basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

- d. Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of the fuel oil no. 2 delivered to the facility.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

2. Wood Fuel

a. Wood Feed Rate

The permittee shall install, operate and maintain, a non-resetting weigh scale for the continuous and permanent recording of the total amount of wood fuel fed to the boilers, in pounds. All wood fuel fed to the boilers shall be recorded by the weigh scale monitoring system.

- 1) The following information shall be recorded on a daily basis:

- a) Date of the meter reading;
- b) Beginning meter reading for the day;
- c) Ending meter reading for the day; and
- d) Total amount of wood fed to the boilers, in pounds, for the day.

- 2) The following information shall be recorded on a monthly basis:

- a) Total amount of wood fed to the boilers, in pounds, for each month; and
- b) Total amount of wood fed to the boilers, in pounds, on a rolling twelve-month (12-month) basis.

- 3) The weigh scale shall be calibrated on a monthly basis or more frequently as recommended by the manufacturer. Each calibration of the weigh scale shall be recorded on the Inspection, Maintenance, and Repair Log of Attachment IIA, Special Condition No. D.4. Upon written request and justification, the Department may approve a less frequent calibration schedule if it can be demonstrated that the weigh scale, due to minimum variations, need not be calibrated on a monthly basis. The calibration schedule for the weigh scale shall be no less frequent than on a monthly basis for the first year of operation or as recommended by the manufacturer.
- 4) The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading.

b. Wood Heat Input

Total wood heat input to the boilers shall be recorded on a monthly and rolling twelve-month (12-month) basis. The total monthly wood heat input to the boiler shall be determined by multiplying the total pounds of wood fed to the boiler for each month from Attachment IIA, Special Condition No. D.2.a.2)a) by the wood's higher heating value of Attachment IIA, Special Condition No. D.2.c.1) for the month.

c. Wood Sampling and Analysis

- 1) On a **monthly basis**, the wood shall be sampled and analyzed in accordance with the wood sampling protocol of Attachment IIA, Special Condition No. E.6.a, to determine the higher heating value of the fuel. Samples shall be collected for analysis at least once per calendar month. Samples shall be collected at least **twenty (20) days** from the last sample collected or less as approved by the Department.
- 2) On a **quarterly basis**, the wood shall be sampled and analyzed in accordance with the wood sampling protocol of Attachment IIA, Special Condition No. E.6.a, to determine the proximate and ultimate analysis, and the chlorine content of the fuel. Samples shall be collected for analysis at least once per calendar quarter. Samples shall be collected at least **sixty (60) days** from the last sample collected or less as approved by the Department. Upon written request and justification, the Department may approve a less frequent sampling and analysis schedule if it can be demonstrated that there are minimum variations in the wood fuel characteristics. The sampling and analysis schedule shall be no less frequent than on a quarterly basis for the first year of operations.

d. Vendors or Sources of Wood Fuel

Records shall be maintained on vendors or sources furnishing wood fuel for use in the boilers. Records shall include:

- 1) Date that wood fuel for the boilers is delivered to the facility;
- 2) Name of the vendor or source;
- 3) Description of the wood fuel accepted for use in the boilers (the description shall include tree species and tree section such as bark, leaves, branches, trunk, etc.); and
- 4) Amount of wood fuel (pounds or tons).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

3. Baghouses

The permittee shall operate and maintain pressure drop meters on each baghouse for continuous reading during operation. The permittee shall monitor these meters at least once daily during operation.

(HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

4. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in **Section A** of this attachment. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Continuous Emission Monitoring Systems (CEMS)

The permittee shall operate, maintain, and calibrate a CEMS at the boilers' exhaust streams to measure opacity, NO_x (as NO₂), SO₂, and CO₂ or O₂ concentrations in the flue gas as follows:

- a. The CEMS shall be operated and data recorded during all periods of operation including periods of startup, shutdown, malfunction, or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.47a(e))¹

- b. Emissions data shall be obtained for at least eighteen (18) hours in at least twenty two (22) out of thirty (30) successive boiler operating days. At least two (2) data points must be used to calculate the one-hour (1-hour) averages. If this minimum data requirement cannot be met with a CEMS, the permittee shall supplement emission data with other monitoring systems as approved by the DOH or the following:

- 1) For SO₂, EPA Reference Method 6, 6A, 6B, or 6C shall be used as specified in 40 CFR §60.47a(h) and (j);
- 2) For NO_x, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used as specified in 40 CFR §60.47a(h) and (j);
- 3) For O₂ or CO₂, EPA Reference Method 3, 3A, or 3B shall be used as specified in 40 CFR §60.47a(h) and (j); and
- 4) To compute each one-hour (1-hour) average concentration in lb/MMBtu, EPA Reference Method 19 shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.47a(f), (g), and (h))¹

c. During each performance evaluation and calibration check for the CEMS, the following methods shall be used:

- 1) For SO₂, EPA Reference Method 6, 6A, 6B, or 6C shall be used as specified in 40 CFR §60.47a(j);
- 2) For NO_x, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used as specified in 40 CFR §60.47a(j); and
- 3) For O₂ or CO₂, EPA Reference Method 3, 3A, or 3B shall be used as specified in 40 CFR §60.47a(j).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.47a(i) and (j))¹

d. The one-hour (1-hour) averages for SO₂ and NO_x shall be expressed in pounds per hour (lb/hr) and pounds per million (ppm) Btu (lb/MMBtu). All six-minute (6-minute) average opacity readings shall be expressed in percent. Sulfur reduction shall be recorded in percent efficiency.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.47a)¹

e. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.13, 40 CFR §60.47a)¹

f. Quarterly accuracy audits and daily calibration drift tests shall be performed in accordance with 40 CFR Part 60, Appendix F. Successive quarterly audits shall occur no closer than two (2) months. Relative Accuracy Test Audit (RATA) must be conducted at least once every four (4) calendar quarters.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.13, 40 CFR §60.47a)¹

g. The permittee shall maintain records of all measurements and monitoring data, including the CEMS performance evaluations; calibrations checks; and adjustments and maintenance performed on the system or devices and all other information required to be recorded by 40 CFR §60.13 in a permanent form suitable for inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.13, 40 CFR §60.47a)¹

6. Records

All records, including support information, shall be true, accurate, and maintained for at least **five (5) years** following the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be in a

permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP §11-60-15)²

Section E. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16, 17, and 24 respectively.

- a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
- b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
- c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the

- requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
 - g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

4. Semi-Annual Reports

- a. The permittee shall submit summary reports as required by NSPS Subpart Da – 40 CFR §60.49a (submitted by August 1 and February 1, following the first calendar half and second calendar half, respectively) which includes the following:

- 1) Results of the annual source performance tests and RATAs.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(a))¹

- 2) SO₂ and NO_x information for each twenty-four hour (24-hour) period

- a) Calendar date;
 - b) The average SO₂ and NO_x emission rates (lb/MMBtu) for each thirty (30) successive boiler operating days, reasons for non-compliance with the emission standards, and description of corrective actions taken;
 - c) Percent reduction of the potential combustion concentration of SO₂;
 - d) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least eighteen (18) hours of operation of the facility, justification for not obtaining sufficient data, and description of corrective actions taken;
 - e) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions;
 - f) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
 - g) Identification of the times when hourly averages have been obtained based on manual sampling methods;

PROPOSED

- h) Identification of the times when pollutant concentration exceeded full span of the continuous monitoring system; and
- i) Description of any modifications to the CEMS which would affect the ability of the CEMS to comply with the Performance Specifications 2 or 3.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(b))¹

- 3) If the minimum quantity of emission data is not obtained for any thirty (30) successive boiler operating days (as required by Attachment IIA, Special Condition No. D.5.b), the following information obtained using the applicable procedures in section 7 of Method 19 for that thirty-day (30-day) period:
 - a) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable;
 - b) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable;
 - c) The lower confidence limit for the mean outlet emission rates (E_o^*) and the upper confidence limit for the mean inlet emission rate (E_i^*) as applicable;
 - d) The applicable potential combustion concentration; and
 - e) The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}) as applicable.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(c))¹

- 4) If any SO₂ emissions are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement indicating if emergency conditions existed and requirements under 40 CFR §46a(d) were met during each period and listing the following information:
 - a) Time periods the emergency condition existed;
 - b) Electrical outlet and demand on the utility system;
 - c) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
 - d) Percent reduction in emissions achieved;
 - e) Atmospheric emission rate (lb/MMBtu) of SO₂ discharged; and
 - f) Actions taken to correct control system malfunction.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(d))¹

- 5) For any periods for which opacity, SO₂, or NO_x emissions data are not available, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and boilers during periods of data unavailability are to be compared with operation of the control system and boilers before and following the period of data unavailability.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(f))¹

- 6) The permittee shall submit a signed statement whether:
- The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified;
 - The data used to show compliance was or was not obtained in accordance with approved methods and procedures and is representative of plant performance;
 - The minimum data requirements have or have not been met; or the minimum data requirements have not been met for errors that were unavoidable; and
 - Compliance with the standards has or has not been achieved during the reporting period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(g))¹

- 7) The permittee shall submit all six-minute (6-minute) periods during which the average opacity exceeds the opacity standards in Attachment IIA, Special Condition No. C.9. The information shall include the dates and percent opacity of those periods.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.49a(h))¹

b. Excess Emissions

The permittee shall submit a written report of all excess emissions to the Department **semi-annually** (submitted by August 1 and February 1 following the first calendar half and second calendar half, respectively) which includes the following:

- The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any concurrent data, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and corrective actions taken.
- Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the boiler(s). The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted, shall also be reported.
- The date and time identifying each period during which the CEMS was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described.
- The report shall so state if no excess emissions has occurred. Also, the report shall so state if the CEMS operated properly during the period and was not subject to any repairs or adjustments except zero and span checks.
- For purposes of this Covered Source Permit, excess emissions shall be defined as follows:
 - Any three-hour (3-hour) period during which the average emissions of NO_x and SO₂, as measured by the continuous monitoring system, exceed the emission limits set forth in Attachment IIA, Special Condition No. C.10; and

- b) Any opacity measurements, as measured by the transmissometer continuous monitoring system exceeding the opacity limits and corresponding averaging times set forth in Attachment IIA, Special Condition No. C.9.
- 6) The enclosed **Excess Emission and Monitoring System Performance Summary Report** shall be used in conjunction to the reporting of excess emissions of NO_x, SO₂, and opacity.
- 7) Excess emissions indicated by the continuous emissions monitoring systems shall be considered violations of the applicable emission and concentration limits for the purposes of the permit.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-32, §11-60.1-38, §11-60.1-90, §11-60.1-161; SIP§11-60-15, §11-60-24; 40 CFR 60.47a, 60.48a, 60.49a)^{1,2}

c. Monitoring Reports

The permittee shall submit **semi-annually**, the attached *Monitoring Report Forms: Fuel Usage/Certification; Spec Used Oil; and Wood Fuel* to the Department. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

5. Annual Emissions

- a. As required by *Attachment IV: Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III: Annual Fee Requirements*, the permittee shall report **annually** the total tons/yr emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The completion and submittal of *Annual Emissions Report Form: Boilers/Dryers*, shall be used in reporting fuel usage.
- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

6. Wood Sampling and Analysis

- a. Protocol

At least **sixty (60) days** prior to commencement of biomass (wood) combustion in the boilers, the permittee shall submit to the Department for approval, in writing, a wood sampling and analysis protocol for determining the wood's proximate and ultimate analysis, the chlorine content, and higher heating value of the fuel. The protocol shall

address in detail the sampling and testing methodology to ensure the samples collected are representative of the wood fired in the boilers during the sampling period. The protocol shall also identify the requirement that the collection of each sample include a recorded description of the wood samples collected (such as the tree species and tree section such as bark, leaves, branches, trunk, etc.). The permittee shall obtain approval for the sampling protocol prior to the commencement of biomass (wood) combustion in the boilers.

Manufacturer's literature on the weigh scale required by Attachment IIA, Special Condition No. D.2.a, shall be submitted to the Department along with the wood sampling and analysis protocol. The literature should include information on the accuracy, manufacturer's recommended calibration methods and frequency, and operating details of the weigh scale.

b. Submittal of Wood Sampling and Analysis Results

Results of the wood sampling and analysis shall be submitted to the Department **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31). The results shall include the sampling collection date, analyzed date, the proximate and ultimate analysis, the chlorine content of the fuel, the higher heating value of the fuel, a description of the wood samples collected and certification that the wood samples were collected and analyzed according to the wood sampling protocol of Attachment IIA, Special Condition No. E.6.a.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-173)¹

Section F. Testing Requirements

1. On an annual basis or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted source performance tests on the boilers for opacity, NO_x as (NO₂), SO₂, volatile organic compounds (VOC), carbon monoxide (CO), lead (Pb), particulate matter (PM), fluorides (Fl), mercury (Hg), beryllium (Be), and sulfuric acid mist. The following test methods (referenced in Appendix A of 40 CFR Part 60) or U.S. EPA approved equivalent methods with prior written approval from the Department, shall be used:
 - a. Method 9 for opacity;
 - b. Methods 1-4 and 19 or 7E for the emissions of NO_x;
 - c. Methods 1-4 and 6 or 6C for the emissions of SO₂;
 - d. Methods 1-4 and 18, 25, or 25A for the emissions of VOC;
 - e. Methods 1-4 and 10 for the emissions of CO;
 - f. Methods 1-4 and 12 or 29 for the emissions of Pb;
 - g. Methods 1-4 and 5 for the emissions of PM;
 - h. Methods 1-4 and 13b for the emissions of Fl;
 - i. Methods 1-4 and 101 or 29 for the emissions of Hg;

- j. Methods 1-4 and 103 or 29 for the emissions of Be; and
- k. Methods 1-4 and 8A for the emissions of Sulfuric Acid Mist.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161;
SIP§11-60.-15; 40 CFR 60.47a)^{1, 2}

2. HCl Emissions

- a. Within **sixty (60) days** after achieving the maximum biomass (wood) firing rate in the boilers, but not later than **one hundred eighty (180) days** after commencement of biomass (wood) combustion in the boilers, and **annually** thereafter, the permittee shall conduct, or cause to be conducted, performance tests on the boilers to determine the emission rate of HCl for the purpose of determining compliance with the emission limit provided for under Attachment IIA, Special Condition No. C.10. The source test for HCl emissions shall be performed with the boilers firing the maximum allowable biomass rate in combination with the minimum anticipated coal feed rate that would be reasonably anticipated during biomass firing.
- b. The following test methods (referenced in Appendix A of 40 CFR Part 60) or U.S. EPA approved equivalent methods with prior written approval from the Department, shall be used:

Methods 1-4 and 26 or 26A for the emissions of HCl.

- c. The test report (as required by Attachment IIA, Special Condition No. F.8) for the source performance tests for HCl shall include:
 - 1) The operating conditions of the boilers at the time of the test;
 - 2) The HCl emission rate in lb/MMBtu and lb/hr;
 - 3) The proximate and ultimate analysis, the chlorine content of the fuel, the higher heating value of the fuel, and a description of the wood samples collected for each of the three (3) test runs. The collection of the wood sample and the analysis shall follow the wood sampling protocol of Attachment IIA, Special Condition No. E.6.a to ensure the samples collected during the test are representative of the fuel fired in the boilers at the time of the test; and
 - 4) The records or a summary of the records containing all of the information maintained in accordance with Attachment IIA, Special Condition No. D.2.d from the start of boiler operations up until the date of the current performance test.
- d. The permittee shall conduct a performance test as specified in Attachment IIA, Special Condition Nos. F.2.a to F.2.c within **ninety (90) days** from the implementation of operational or physical modifications that have the potential to increase emissions of HCl above that of the prior performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

3. Note that Method 1 cannot be used under the following conditions:

- a. Cyclonic or swirling gas flow at the sampling location;
- b. Stack or duct with a diameter less than twelve (12) inches or a cross-sectional area less than one hundred thirteen (113) square inches; or
- c. Sampling location less than two (2) stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR 60, App. A, Method 1)¹

4. Each source performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with the applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, SIP§11-60.-15; 40 CFR §60.8)^{1, 2}

5. The source performance tests shall be conducted at the maximum expected operating capacity of the boilers.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

6. The permittee, at its own expense, shall be responsible for installing, providing and maintaining the necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutant emissions. The Department may monitor any of the required source performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP§11-60.-15)²

7. **At least thirty (30) calendar days prior to performing a source performance test**, the permittee shall submit a written source performance test plan to the Department that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP§11-60.-15)²

8. **Within sixty (60) days after completion of the source performance test**, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.48a, §60.49a, SIP§11-60.-15)²

9. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

10. Upon written request and justification by the permittee, the Department may waive the requirement for a specific annual source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section G. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

PROPOSED

**ATTACHMENT IIB: SPECIAL CONDITIONS
COAL PROCESSING
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIB of the Covered Source Permit encompasses the following equipment and associated appurtenances:

275 tph Coal Processing Equipment:

- a. Overland Coal Conveyor;
- b. Two (2) Coal Lowering Wells;
- c. Four (4) Coal Conveyors;
- d. Coal Reclaim Hopper;
- e. 275 tph Coal Crusher;
- f. Four (4) Coal Storage Silos;
- g. One (1) Mikro-Pulsaire Baghouse for the Coal Crusher (model no. 64S-8-40 "C"); and
- h. One (1) Mikro-Pulsaire Baghouse for the Coal Storage Silos and Coal Conveyor 4 (model no. 100S-8-20 "C").

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to all equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. This equipment is subject to the provisions of the following sections of 40 CFR Part 60, Standards of Performance for New Stationary Sources:

- a. Subpart A - General Provisions; and
- b. Subpart Y - Standards of Performance for Coal Preparation Plants.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, 40 CFR §60.250)¹

2. The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, testing, monitoring and reporting requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, 40 CFR §60.250)¹

Section C. Operational and Emission Limitations

1. Air Pollution Control Equipment

A baghouse shall be used to meet the particulate matter emission limit three-hour (3-hour) average as shown in Attachment IIB, Special Condition No. C.2.

- a. The pressure drop across the baghouse shall be maintained at 1" to 7" H₂O.
- b. The permittee shall follow a regular maintenance schedule to ensure the following items of the baghouse are operating properly:
 - 1) The filter bags are checked for any tears, holes, abrasions and scuffs; and replaced as needed;
 - 2) The hoppers are discharged in a timely manner to prevent excessive particulate buildup which could cause compaction, overflow or plugging;
 - 3) The cleaning systems are maintained and operated at sufficient intervals to minimize particulate buildup or caking on the filter bags; and
 - 4) Other miscellaneous items/equipment essential for the effective operation of the baghouses are maintained.
- c. The baghouse shall be operated at all times during coal crushing operations.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-37, §11-60.1-90, §11-60.1-161, 40 CFR §60.252)¹

2. Emission Limitations

The permittee shall not discharge or cause the discharge into the atmosphere:

- a. From the baghouse servicing the coal crushing operations, particulate matter in excess of 0.3 lb/hr three-hour (3-hour) average.
- b. From the baghouse servicing the coal crushing operations, opacity of seven (7) percent or greater (six-minute average).

(Auth.: §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-33, §11-60.1-90, §11-60.1-161, 40 CFR §60.252)¹

3. Fugitive Particulate Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, etc.) at all material transfer points, stockpiles, and throughout the workyard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions or fugitive dust beyond the lot line of the property on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

4. Alternate Operating Scenarios

- a. Terms and conditions for a reasonably anticipated operating scenario identified by the permittee in the covered source permit application and approved by the Department is to use haul trucks to transport coal into the facility in lieu of the covered overland conveyor.
- b. The permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility the scenario under which it is operating and submit a written notification to the Department **within five (5) working days**, the date and expected duration of the operating scenario.
- c. The terms and conditions under each alternate operating scenario shall meet all applicable requirements including conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. The permittee shall operate and maintain pressure drop meters on each baghouse for continuous reading during operation. The permittee shall monitor these meters at least once daily during operation.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

2. Visible Emissions (VE)

Except in those months when source performance tests are conducted pursuant to Attachment IIB, Special Condition No. F.1, the permittee shall conduct **monthly** (*calendar month*) VE observations for each equipment subject to opacity limits in accordance with Method 9 of 40 CFR Part 60, Appendix A-4. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in **Section A** of this attachment. At a minimum, these

records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. Records

All records, including support information, shall be true, accurate, and maintained at the facility for at least **five (5) years** following the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 16, 17, and 24, respectively.
 - a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
 - b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
 - c. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90, SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for stack testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR,

§11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

Section F. Testing Requirements

1. On an annual basis or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted source performance tests on the baghouses for opacity as specified in 40 CFR §60.257. Method 9 of 40 CFR Part 60, Appendix A-4, and the procedures in 40 CFR §60.11 shall be used to determine opacity, with the following exceptions:
 - a. The duration of the Method 9 of 40 CFR Part 60, Appendix A-4, performance test shall be one hour (1 hour) (ten (10) six-minute (6-minute) averages).
 - b. If, during the initial thirty (30) minutes of the observation of a Method 9 of 40 CFR Part 60, Appendix A-4, performance test, all of the six-minute (6-minute) average opacity readings are less than or equal to half of the applicable opacity limit, then the observation may be reduced from one hour (1 hour) to thirty (30) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.8, §60.11, §60.255, §60.257)¹

2. The source performance tests shall be conducted at the maximum expected operating capacity of the coal processing equipment. The Department may monitor any of the required tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

3. **At least thirty (30) calendar days prior to performing a source performance test**, the permittee shall submit a written source performance test plan to the Department that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP§11-60.-15)²

4. **Within sixty (60) days after completion of the source performance test**, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.48a, §60.49a, SIP§11-60.-15)²

5. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

6. Upon written request and justification by the permittee, the Department may waive the requirement for a specific annual source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section G. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

PROPOSED

**ATTACHMENT IIC: SPECIAL CONDITIONS
LIMESTONE PROCESSING
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIC of the Covered Source Permit encompasses the following equipment and associated appurtenances:
 - a. One (1) Limestone storage hopper with Mikro-Pulsaire baghouse (model no. 100S-8-20 "C").
 - b. Two (2) complete Micron Powder Systems Limestone Processing Systems each with a maximum feed rate of 22 tph and each consisting of the following equipment:
 - 1) Limestone Feeder;
 - 2) 4.75 MMBtu/hr limestone dryer (1A and 1B);
 - 3) Mikro pulverizer (model no. 300 ACM);
 - 4) Mikro-Pulsaire baghouse (model no. 420S-10-50 "C"); and
 - 5) Conveyors.
- (Auth.: HAR §11-60.1-3)
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number, and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. This equipment is subject to the provisions of the following sections of 40 CFR Part 60, Standards of Performance for New Stationary Sources:
 - a. Subpart A - General Provisions; and
 - b. Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, 40 CFR §60.670)¹

2. The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, testing, monitoring, and reporting requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, 40 CFR §60.670)¹

Section C. Operational and Emission Limitations

1. Limestone Dryers

- a. The limestone dryers shall be fired on fuel oil no. 2 with a maximum fuel sulfur content not to exceed 0.5 percent by weight, or specification (spec) used oil as allowed in Attachment IIC, Special Condition No. C.1.b or any combination thereof.
- b. Specification (Spec) Used Oil
 - 1) The limestone dryers may also be fired on spec used oil such that the total usage does not exceed 250,000 gallons in any rolling twelve-month (12-month) period.
 - 2) The permit conditions prescribed herein may at any time be revised by the Department to reflect federal or state promulgated rules on used oil.
 - 3) This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing, and burning of used oil.
 - 4) The used oil shall be obtained only from Unitek Solvent Services, Inc., Phillips Services, and sources within AES Hawaii, Inc. Used oil may be obtained from other sources, provided a written notification identifying the new source is submitted to the Department and approved, prior to the acceptance of the used oil.
 - 5) Samples of the used oil generated from the facility shall be taken from the holding tanks or drums, and composited and analyzed for compliance with the limits in Attachment IIC, Special Condition No. C.1.b.9) prior to being emptied into the reclaim tank and burned. These samples shall be taken in such a manner that the composite sample is representative of all of the used oil generated by the facility for that period of time. The composite sample shall represent no more than 5,000 gallons of used oil or all of the used oil collected in any three (3) month period, whichever is less.
 - 6) Each composite sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties for which limits are given in Attachment IIC, Special Condition No. C.1.b.9).
 - 7) Analysis reports shall be obtained (for the twice monthly testing) for the constituents/properties for which limits are given in Attachment IIC, Special Condition No. C.1.b.9) for all deliveries of spec used oil.

- 8) This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if declared or determined to be a hazardous waste.
- 9) The following constituents/properties of the spec used oil shall not exceed the specified units listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	0.5% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	< 2 ppm

- 10) Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment IIC, Special Condition No. C.1.b.9) is allowed only for spec used oil that were not deemed hazardous.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-140, 40 CFR §279.11)

2. Air Pollution Control Equipment

Baghouses shall be used to meet the particulate matter emission limit three-hour (3-hour) average as shown in Attachment IIC, Special Condition No. C.3.

- a. The pressure drop across the baghouses shall be maintained at 1" to 7" H₂O.
- b. The permittee shall follow a regular maintenance schedule to ensure the following items of the baghouse are operating properly:
 - 1) The filter bags are checked for any tears, holes, abrasions, and scuffs; and replaced as needed;
 - 2) The hoppers are discharged in a timely manner to prevent excessive particulate buildup which could cause compaction, overflow or plugging;
 - 3) The cleaning systems are maintained and operated at sufficient intervals to minimize particulate buildup or caking on the filter bags; and
 - 4) Other miscellaneous items/equipment essential for the effective operation of the baghouses are maintained.

- c. The baghouses shall be operated at all times during limestone processing.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. Emission Limits

From the baghouses servicing the limestone dryers and pulverizers, the permittee shall not exceed the following emission limitations:

Compound	Maximum Emission Limits (lb/hr) (3-hr average)
Particulate Matter	0.04
Sulfur Dioxides	4.8
Nitrogen Oxides	1.4

(Auth.: HAR §11-60.1-5, §11-60.1-90)

4. For any six (6) minute averaging period, each baghouse shall not exhibit visible emissions of greater than seven (7) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP§11-60-24; 40 CFR §60.670)^{1,2}

5. Fugitive Particulate Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, etc.) at all material transfer points, stockpiles, and throughout the workyard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions or fugitive dust beyond the lot line of the property on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. Limestone Dryers

- a. Fuel Monitoring

The permittee shall operate and maintain a non-resetting fuel meter on the limestone dryers for the permanent recording of the total usage of spec used oil. Monthly records shall be kept of the beginning meter readings and the total spec used oil usage. Monthly fuel summaries shall include the monthly total spec used oil usage and the total fuel used based on a twelve-month (12-month) rolling basis.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

b. Total Fuel Usage and Specification

Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of the fuel delivered to the facility for subsequent transfer to the limestone dryers covered under this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-5, 11-60.1-11, §11-60.1-90)

2. The permittee shall operate and maintain pressure drop meters on each baghouse for continuous reading during operation. The permittee shall monitor these meters at least once daily during operation.

(Auth.: HAR §11-60.1-3, §11-60.1-5, 11-60.1-11, §11-60.1-90)

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in **Section A** of this attachment. At a minimum, these records shall include: the date of the inspection, name and title of the inspector, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, 11-60.1-11, §11-60.1-90)

4. Visible Emissions (VE)

Except in those months when source performance tests are conducted pursuant to Attachment IIC, Special Condition No. F.1, the permittee shall conduct **monthly** (*calendar month*) VE observations for each equipment subject to opacity limits in accordance with Method 9 of 40 CFR Part 60, Appendix A-4. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. Records

All records, including support information, shall be true, accurate and maintained at the facility for at least **five (5) years** from the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP§11-60-15)²

Section E. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 16, 17, and 24, respectively.

- a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
- b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
- c. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** *any deviations from the permit requirements*, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP§11-60-16)²

3. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

4. Monitoring Reports

The permittee shall submit **semi-annually**, the attached *Monitoring Report Forms: Fuel Usage/Certification; Spec Used Oil; and Opacity Exceedances* to the Department. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

5. Annual Emissions

- a. As required by *Attachment IV: Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III: Annual Fee Requirements*, the permittee shall report **annually** the total tons/yr emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The completion and submittal of *Annual Emissions Report Form: Boilers/Dryers*, shall satisfy the requirements for annual emissions reporting.

- b. Upon written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

Section F. Testing Requirements

1. On an annual basis or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted source performance tests on the baghouses for opacity as specified in 40 CFR §60.675 as follows:
 - a. For the baghouses servicing the limestone dryers and pulverizers, Method 9 of 40 CFR Part 60, Appendix A-4, and the procedures in 40 CFR §60.11 shall be used to determine opacity. The duration of the Method 9 of 40 CFR Part 60, Appendix A-4, performance test shall be a minimum of three-hours (3-hours) thirty (30) six-minute (6-minute) averages.
 - b. For the baghouse servicing the limestone storage hopper, Method 9 of 40 CFR Part 60, Appendix A-4, and the procedures in 40 CFR §60.11 shall be used to determine opacity. The duration of the Method 9 of 40 CFR Part 60, Appendix A-4, performance test shall be one-hour (1 hour) ten (10) six-minute (6-minute) averages. The duration of the performance test may be reduced to the duration the affected facility operates (but not less than 30 minutes).

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.8, §60.11, §60.675)¹

2. The source performance tests shall be conducted at the maximum expected operating capacity of the limestone processing equipment. The Department may monitor any of the required source performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

3. **At least thirty (30) calendar days prior to performing a source performance test**, the permittee shall submit a written source performance test plan to the Department that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP§11-60.-15)²

4. **Within sixty (60) days after completion of the source performance test**, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP§11-60.-15)²

5. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

6. Upon written request and justification by the permittee, the Department may waive the requirement for a specific annual source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

7. Although stack tests for particulate matter, sulfur dioxide, and nitrogen dioxide are not required at this time, the Department reserves the right to require, at any time, a source performance test(s) to be performed for the baghouses in Attachment IIC.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)²

Section G. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

PROPOSED

**ATTACHMENT IID: SPECIAL CONDITIONS
COOLING TOWER
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IID of the Covered Source Permit encompasses the following equipment and associated appurtenances:

One (1) GEA Integrated Cooling Technologies, Inc., five-cell (5-cell) cooling tower (model no. 545438-5I-32FCF, fiberglass counter flow, maximum water circulating rate is 104,000 gal/min, maximum drift rate is 0.002%).

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number, and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Chromium-containing water treatment chemicals shall not be used in the cooling tower.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-180; 40 CFR §63.402)¹

2. The design circulating rate of the cooling tower shall not exceed 104,000 gallons per minute.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. The cooling tower maximum drift loss shall not exceed 0.002% of the total circulating rate of the water.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

4. The cooling tower circulating water shall not contain the following:

- a. Total dissolved solids in excess of 52,000 mg/l (calendar year annual average); and
- b. Chlorine in excess of 1 mg/l.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Manufacturer's data on the design total drift rate and maximum design circulating flow rate of the cooling tower shall be kept on file at the facility for the life of the equipment.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. Records shall be maintained on the type and quantities of water treatment chemicals used in the cooling tower on a monthly basis. All Material Safety Data Sheets (MSDSs) associated with each chemical shall be maintained on site and made available for Department's inspection upon request.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. The cooling tower blowdown water shall be analyzed monthly for the following:

- a. Total dissolved solids; and
- b. Chlorine.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90)

4. An on-site log shall be kept of the cooling tower blowdown water analysis test results.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the cooling tower.

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the cooling tower. At a minimum, these records shall include: the date of the inspection, name and title of the inspector, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

6. The Department at any time may require the permittee to conduct water sample analysis for chromium based water treatment chemicals.

(Auth.: HAR §11-60.1-5, §11-60.1-90, 40 CFR §63.404)

7. Records

All records, including support information, shall be true, accurate, and maintained at the facility for at least **five (5) years** from the date of the monitoring sample, measurement,

test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Notification and reporting requirements pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 17 and 24, respectively.
 - a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
 - b. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for stack testing or more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Monitoring Reports

The permittee shall submit **semi-annually**, the attached *Annual Emissions/Monitoring Report Form: Cooling Tower* to the Department. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR,

§11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. Annual Emissions

- a. As required by *Attachment IV: Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III: Annual Fee Requirements*, the permittee shall report **annually** the total tons/yr emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The completion and submittal of *Annual Emissions/Monitoring Report Form: Cooling Tower*, shall satisfy the requirements for annual emissions reporting.
- b. Upon written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

Section E. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of SIP.

**ATTACHMENT IIE: SPECIAL CONDITIONS
ASH HANDLING
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIE of the Covered Source Permit encompasses the following equipment and associated appurtenances:

Ash Handling Equipment

- a. Fly Ash Reinjection Surge Hopper;
- b. Bed Ash Storage Hopper;
- c. One (1) Fly Ash Silo;
- d. One (1) Bed Ash Silo; and
- e. Conditioned Ash Mixer.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number, and manufacturer. The identification tag or nameplate shall be attached to all equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Emissions Limitations

The permittee shall not discharge or cause the discharge into the atmosphere:

- a. From the ash handling operations, particulate matter in excess of 31.9 lb/hr three-hour (3-hour) average.
- b. Emissions from the ash handling operations exhibiting an opacity of twenty (20) percent or greater (six-minute average).

(Auth.: §11-60.1-3, §11-60.1-32, §11-60.1-37, §11-60.1-90)

2. Fugitive Particulate Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, etc.) at all material transfer points, stockpiles, and throughout the

workyard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions or fugitive dust beyond the lot line of the property on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

3. Alternate Operating Scenario

The permittee may stockpile a maximum of 10,000 tons of conditioned ash at any given time in the facility's workyard in the event the ash silos reach their maximum capacity.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the equipment listed in **Section A** of this attachment. At a minimum, these records shall include: the date of the inspection, name and title of the inspector, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

2. Records

All records, including support information, shall be true, accurate, and maintained at the facility for at least **five (5) years** from the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section D. Notification and Reporting Requirements

1. Notification and reporting requirements pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 17 and 24, respectively.
 - a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
 - b. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for stack testing or more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and

- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

Section E. Testing Requirements

Although a stack test or opacity test is not required at this time, the Department reserves the right to require, at any time, a stack test or opacity test to be performed for these sources.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP §11-60.1-15)²

Section F. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

PROPOSED

**ATTACHMENT IIF: SPECIAL CONDITIONS
STORAGE TANK
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment IIF of the Covered Source Permit encompasses the following equipment and associated appurtenances:

60,000 gallons (230.7 m³) Above Ground Storage Tank:

- a. Storing fuel oil no. 2;
- b. Dimensions are: 18 ft. high and 24 ft. in diameter; and
- c. Tank characteristics are: cone roof, white shell, and vertical fixed-roof.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number, and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. This equipment is subject to the provisions of the following section of 40 CFR Part 60, Standards of Performance for New Stationary Sources:

Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 (specifically 40 CFR §60.116b – Monitoring of Operations).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.110b and §60.116b)¹

2. The storage tank is exempt from the remaining sections of Subpart Kb due to the type of fuel stored in the tank. Should there be any relaxation in this restriction by storing any volatile organic liquid (VOL) with a true vapor pressure greater than or equal to 3.5 kPa, the petroleum storage tank will be subject to all applicable requirements of Subpart Kb, including all notification, monitoring, and reporting requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.110b and §60.116b)¹

Section C. Operational and Emission Limitations

Only fuel oil no. 2 shall be stored in the tank.

(Auth.: HAR §11-60.1-5, §11-60.1-39, §11-60.1-90, §11-60.1-161; 40 CFR §60.110b)¹

Section D. Monitoring and Recordkeeping Requirements

1. Records showing the dimensions (meters) and capacity (cubic meters) of the storage tank shall be maintained on-site for the life of the storage tank.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.116b(b); SIP§11-60-15)^{1,2}

2. Records shall be maintained on the type of fuel stored in the tank, the period of storage, and the maximum true vapor pressure (kPa) of the fuel stored during the respective storage period. Determination of the maximum true vapor pressure shall be in accordance with 40 CFR Part 60, Section 116b(e).

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.116b; SIP§11-60-15)^{1,2}

3. All records, including support information, shall be true, accurate, and maintained at the facility for at least **five (5) years** from the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Notification and reporting requirements pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 17 and 24, respectively.
 - a. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
 - b. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report (in writing) **within five (5) working days** *any deviations from the permit requirements*, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for stack testing or more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. Monitoring Reports

The permittee shall submit **semi-annually**, the attached *Monitoring Report Form: Storage Tanks* to the Department. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification Form

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

Section F. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

²The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT II - INSIG: SPECIAL CONDITIONS
INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

This attachment encompasses insignificant activities listed in HAR, §11-60.1-82(f) and (g) for which provisions of this permit and HAR, Subchapter 2, General Prohibitions, apply.

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

1. The permittee shall take measures to operate applicable insignificant activities in accordance with the provisions of HAR, Subchapter 2 for visible emissions, fugitive dust, incineration, process industries, sulfur oxides from fuel combustion, storage of volatile organic compounds, volatile organic compound water separation, pump and compressor requirements, and waste gas disposal.

(Auth.: HAR §11-60.1-3, §11-60.1-82, §11-60.1-90)

2. The Department may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-82, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. The Department reserves the right to require monitoring, recordkeeping, or testing of any insignificant activity to determine compliance with the applicable requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. All records shall be maintained for at least five (5) years from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department or its authorized representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section D. Notification and Reporting

Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
6. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
7. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted **within sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

In lieu of addressing each emission unit as specified in **Compliance Certification Form**, the permittee may address insignificant activities as a single unit provided compliance is met with all applicable requirements. If compliance is not totally attained, the permittee shall identify the specific insignificant activity and provide the details associated with the noncompliance.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

Section E. Agency Notification

Any document (including reports) required to be submitted by this Covered Source Permit shall be done in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1.

1. Annual fees shall be paid in full:
 - a. Within **sixty (60) days** after the end of each calendar year; and
 - b. Within **thirty (30) days** after the permanent discontinuance of the covered source.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Hawaii Department of Health the nature and amounts of emissions.

1. Complete the attached form(s):

**Annual Emissions Report Form: Boilers/Dryers; and
Annual Emissions/Monitoring Report Form: Cooling Tower.**

2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health **within sixty (60) days after the end of each calendar year** and shall be mailed to the following address:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information, including information concerning secret processes or methods of manufacture, by submitting a written request to the Director of Health and clearly identifying the specific information that is to be accorded confidential treatment.

PROPOSED

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0087-02-C
PAGE 1 OF ____

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as requested by the Department.

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

PROPOSED

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0087-02-C
(CONTINUED, PAGE 2 OF ____)**

Issuance Date:

Expiration Date:

The purpose of this form is to evaluate whether or not the facility was in compliance with the permit terms and conditions during the covered period. If there were any deviations to the permit terms and conditions during the covered period, the deviation(s) shall be certified as *intermittent compliance* for the particular permit term(s) or condition(s). Deviations include failure to monitor, record, report, or collect the minimum data required by the permit to show compliance. In the absence of any deviation, the particular permit term(s) or condition(s) may be certified as *continuous compliance*.

Instructions:

Please certify Sections A, B, and C below for continuous or intermittent compliance. Sections A and B are to be certified as a group of permit conditions. Section C shall be certified individually for each operational and emissions limit condition as listed in the Special Conditions section of the permit (list all applicable equipment for each condition). Any deviations shall also be listed individually and described in Section D. The facility may substitute its own generated form in verbatim for Sections C and D.

A. Attachment I, Standard Conditions

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All standard conditions	All Equipment(s) listed in the permit	

B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All monitoring conditions	All Equipment(s) listed in the permit	
<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All recordkeeping conditions	All Equipment(s) listed in the permit	
<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All reporting conditions	All Equipment(s) listed in the permit	
<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All testing conditions	All Equipment(s) listed in the permit	
<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
All INSIG conditions	All Equipment(s) listed in the permit	

PROPOSED

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0087-02-C
(CONTINUED, PAGE ____ OF ____)**

Issuance Date:

Expiration Date:

C. Special Conditions - Operational and Emissions Limitations

Each permit term/condition shall be identified in chronological order using attachment and section numbers (e.g., Attachment II, B.1, Attachment IIA, Special Condition No. B.1.f, etc.). Each equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Method</u>	<u>Compliance</u>
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

(Make Additional Copies if Needed)

PROPOSED

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0087-02-C
(CONTINUED, PAGE ____ OF ____)**

Issuance Date:

Expiration Date:

D. Deviations

<u>Permit Term/ Condition</u>	<u>Equipment(s) / Brief Summary of Deviation</u>	<u>Deviation Period time (am/pm) & date (mo/day/yr)</u>	<u>Date of Written Deviation Report to DOH (mo/day/yr)</u>
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	

*Identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred.

(Make Additional Copies if Needed)

**MONITORING REPORT FORM
FUEL USAGE/CERTIFICATION
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Fuel Certification:

Boilers

1. Report the maximum sulfur content (percent by weight) of the coal and fuel oil no. 2 during this period.
Coal _____% Fuel oil no. 2 _____%
2. Report the maximum feed rate (tons/hr) of the TDF during this period.
TDF _____ ton/hr
3. Report the maximum feed rate (lb/hr) of coal and/or TDF during this period.
Coal/TDF _____ ton/hr

Limestone Dryers

Report the maximum sulfur content (percent by weight) of the fuel oil no. 2 during this period.
Fuel oil no. 2 _____%

**MONITORING REPORT FORM
SPEC USED OIL
COVERED SOURCE PERMIT NO. 0087-02-C
(PAGE 1 OF 2)**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions, semi-annually.

(Make Copies for Future Use)

Fill out separate forms for the boilers and limestone dryers

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, etc.)

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

MONTH	MONTHLY FUEL CONSUMPTION (GALLONS)	12-MO. ROLLING BASIS (GALLONS)	NOTES
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
SPEC USED OIL
COVERED SOURCE PERMIT NO. 0087-02-C
(PAGE 2 OF 2)**

Issuance Date:**Expiration Date:**

Number of used oil analyses received/performed for this report period: _____

Did any of the used oil analyses indicate exceedances of the permitted limits: ☐ YES ☐ NO

If Yes, indicate the number of exceedances: _____

Indicate the average of the Used Oil analyses results received/performed:

Constituent/Property**Average Results**

Arsenic	_____ ppm by weight
Cadmium	_____ ppm by weight
Chromium	_____ ppm by weight
Lead	_____ ppm by weight
Total Halogens	_____ ppm by weight
Sulfur	_____ % by weight
Flash Point	_____ °F
Polychlorinated Biphenyls (PCB)	_____ ppm by weight

**MONITORING REPORT FORM
WOOD FUEL
COVERED SOURCE PERMIT NO. 0087-02-C
(PAGE 1 OF 2)**

Issuance Date: _____**Expiration Date:** _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions semiannually.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, etc.)

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

MONTH	WOOD FEED RATE, MONTHLY BASIS (TONS)	WOOD FEED RATE, ROLLING 12-MONTH BASIS (TONS)	WOOD HEAT INPUT, MONTHLY BASIS (MMBTU)	WOOD HEAT INPUT, ROLLING 12- MONTH BASIS (MMBTU)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

**MONITORING REPORT FORM
WOOD FUEL
COVERED SOURCE PERMIT NO. 0087-02-C
(PAGE 2 OF 2)**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions semiannually.

1. Report the maximum feed rate (lb/hr) of wood during this period.: _____ lb/hr
2. Report the maximum feed rate (lb/hr) of coal and wood during this period.: _____ lb/hr
3. Report the maximum feed rate (lb/hr) of coal, TDF, and wood during this period.: _____lb/hr

Treated Wood: In the table below, report on any instances where treated wood was fired in the boilers during the reporting period. Include instances where wood fired was painted or chemically treated. If no such instances occurred, state so below.

[illegible]

**MONITORING REPORT FORM
STORAGE TANK
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions, semi-annually.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Storage Tank:

1. Report the type of fuel stored in the 60,000 gallon above ground storage tank during this period.

2. Certify that there were no changes to the dimensions of the above ground storage tank.

**MONITORING REPORT FORM
OPACITY EXCEEDANCES
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:**Expiration Date:**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information **semi-annually**:

(Make Copies for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Facility Name: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature):_____

Visible Emissions:

Report the following on the lines provided below: all date(s) and six (6) minute average opacity reading(s) which the opacity limit was exceeded during the monthly observations; or if there were no exceedances during the monthly observations, then write "no exceedances" in the comment column.

[illegible]

**ANNUAL EMISSIONS REPORT FORM
BOILERS/DRYERS
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Type of Fuel Fired	Fuel Usage gal/yr or ton/yr	% Sulfur Content by weight	Identify % Nitrogen, % Ash & % Lead, if applicable

Types of Fuel: • Residual Oil: Specify Grade, No. 6, 5, or 4; • Coal;
 • Distillate Oil (No. 2); • Tire Derived Fuel (TDF);
 • Specification (Spec) Used Oil; • If Other, specify.

<u>Type of Air Pollution Control</u>	<u>In Use?</u>	<u>Pollutant Controlled</u>	<u>Control Efficiency, % reduction</u>
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____

**ANNUAL EMISSIONS/MONITORING REPORT FORM
COOLING TOWER
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Cooling Tower:

1. Report the maximum total dissolved solids (mg/l) during this period. _____ mg/l
2. Report the maximum chlorine (mg/l) during this period. _____ mg/l
3. Certify that chromium-containing water treatment chemicals were not used during this period.

**EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0087-02-C
(PAGE 1 OF 2)**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 11-60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information:

(Make Copies for Future Use)

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Covered Source Permit No.: _____ Condition No.: _____

PSD Permit No.: _____ Condition No.: _____

Code of Federal Regulations (CFR): _____

Pollutant Monitored:

From: Date _____ - Time _____

To: Date _____ - Time _____

Emission Limit: _____

Date of Last CEMS Certification/Audit _____

Total Source Operating Time _____

EMISSION DATA SUMMARY

1. Duration (Hours/Periods) of Excess Emissions in Reporting Period due to:

- a. Start-Up/Shutdown _____
- b. Cleaning/Soot Blowing _____
- c. Control Equipment Failure _____
- d. Process Problems _____
- e. Other Known Causes _____
- f. Unknown Causes _____
- g. Fuel Problems _____

Number of incidents of excess emissions _____

2. Total Duration of Excess Emissions _____

3. Total Duration of Excess Emissions
(% of Total Source Operating Time) _____

CEMS PERFORMANCE SUMMARY

1. CEMS Downtime (Hours/Periods) in Reporting Period Due to:

- a. Monitor Equipment Malfunctions _____
- b. Non-Monitor Equipment Malfunctions _____
- c. Quality Assurance Calibration _____
- d. Other Known Causes _____
- e. Unknown Causes _____

Number of incidents of monitor downtime. _____

2. Total CEMS Downtime _____

3. Total CEMS Downtime
(% of Total Source Operating Time) _____

**EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0087-02-C
(CONTINUED, PAGE 2 OF 2)**

Issuance Date:

Expiration Date:

CERTIFICATION by Responsible Official

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date:

Expiration Date:

The **Visible Emissions (VE) Form** shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with 40 CFR Part 60, Appendix A, Method 9. At least **annually** (*calendar year*), VE observation shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The VE Form shall be completed as follows:

1. VE observations shall take place during the day only. The opacity shall be noted in five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the VE Form using the symbols as shown.
3. For VE observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. For VE observations of fugitive emissions from crushing and screening plants, stand at least 4.57 meters (15 feet) from the visible emissions source, but not more than a quarter mile from the visible emission source.
5. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
6. The six (6) minute average opacity reading shall be calculated for each observation.
7. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at the maximum permitted capacity.
8. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed VE Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

Any required initial and annual performance test performed in accordance with Method 9 by a certified reader shall satisfy the respective equipment's VE monitoring requirements for the month the performance test is performed.

**VISIBLE EMISSIONS FORM
COVERED SOURCE PERMIT NO. 0087-02-C**

Issuance Date: _____

Expiration Date: _____

(Make Copies for Future Use for Each Stack or Emission Point)

Company Name: _____

For stacks, describe equipment and fuel: _____

For fugitive emissions from crushers and screens, describe:

Fugitive emission point: _____

Plant Production (tons/hr): _____

(During observation)

Site Conditions:

Emission point or stack height above ground (ft): _____

Emission point or stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

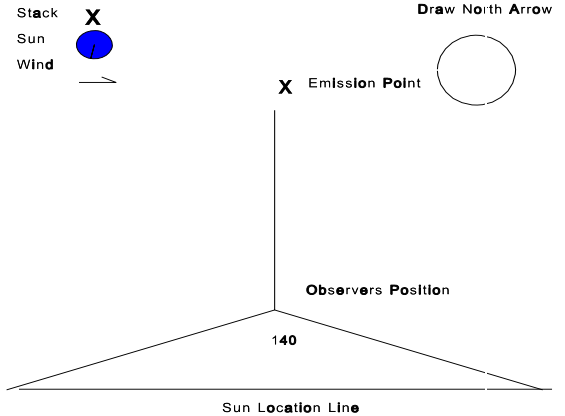
Wind speed (mph): _____

Temperature (EF): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____



MINUTE S	Seconds				COMMENTS
	0	15	30	45	
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: _____

MINUTE S	Seconds				COMMENTS
	0	15	30	45	
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					